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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/611,560	06/30/2003	Andrew J. Carroll	020431.1292	5995
53184 7590 12/13/2007 i2 TECHNOLOGIES US, INC. ONE i2 PLACE, 11701 LUNA ROAD DALLAS, TX 75234			EXAMINER LEE, PHILIP C	
			ART UNIT 2152	PAPER NUMBER
			MAIL DATE 12/13/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/611,560

Applicant(s)

CARROLL ET AL.

Examiner

Philip C. Lee

Art Unit

2152

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

1. This action is responsive to the amendment and remarks filed on September 17, 2007.
2. Claims 1-38 are presented for examination.
3. The text of those sections of Title 35, U.S. code not included in this office action can be found in a prior office action.

Objection

4. Claims 1-38 are objected to because of the following informalities or grammar errors: As per claims 1 (line 18), 13 (line 15), 25 (line 16), 37 (line 16), and 38 (lines 18, 23 and 32), "a bulk data transfer" should have been "the bulk data transfer"; As per claim 25 (line 17), "one or more data entities" should have been "the one or more data entities"; As per claims 1 (line 20), 37 (line 18) and 38 (line 20), "the one or more selected source data stores" should have been "the one or more source data stores selected"; As per claim 38 (line 24), "one or more data stores" should have been "the one or more data stores"; Line 29, "each session interface" should have been "said each session interface".

Claim Rejections – 35 USC 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claim 37 is rejected under 35 U.S.C. 101 because “A system” comprising interfaces or means for providing interfaces (e.g., JAVA interface (i.e., software) disclosed in page 5, line 32- page 6, line 6 of the specification) does not include any functional structure of a system. A system (i.e., apparatus) comprising interfaces (i.e., software) or means for providing interfaces is considered as program per se, which is not one of the categories of statutory subject matter.

Claim Rejections – 35 USC 112

7. The following is a quotation of the second paragraph of 35 U.S. C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claim 38 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. The following terms lack proper antecedent basis:

i. “the corresponding data store” – claim 38.

b. Claim language in the following claims is not clearly understood:

ii. As per claim 38, lines 21, 24-25, 27-29 and 31, it is unclear if “each programmatic interface”/ “one ore more programmatic interfaces”/ “the programmatic interfaces”/ “one or more defined programmatic interfaces”, refers to “one or more programmatic source interfaces” in line 6 or “one or more

programmatic target interfaces” in 14 ; Lines 14, 16-17, and 18-20, it is uncertain if “the corresponding data store” refers to “the corresponding source data store” in line 6 or “the corresponding target data store” in line 11; Line 31, it is unclear what is "its" referring to?

Claim Rejections – 35 USC 102

9. Claims 1, 4-6, 8-9, 13, 16-18, 20-21, 25, 28-30, 32-33 and 37-38 are rejected under 35 U.S.C. 102(e) as being anticipated by Jayaram et al, U.S. Patent 6,996,589 (hereinafter Jayaram).

10. Jayaram was cited in the previous office action.

11. As per claims 1, 13, 25 and 37, Jayaram teaches the invention as claimed for providing bulk data transfers between one or more data stores (col. 11, lines 1-11), comprising:

a data integration server (combination of 220, 234, 235, 250, 260, 270 of fig. 2) coupled with the one or more data stores (col. 11, lines 1-11), the data integration server comprising:

one or more programmatic source interfaces, each being associated with one or more source data stores coupled to the data integration server, wherein the one or more programmatic source interfaces are defined according to a common programmatic source interface specification (col. 11, lines 1-5) and are exposed during a bulk data transfer, one or more data entities are extracted from the one or more source data stores for loading

into one or more selected target data stores (col. 11, lines 5-11; col. 10, lines 56-63; col. 12, lines 4-22); and

one or more programmatic target interfaces, each being associated with one or more target data stores coupled to the data integration server, wherein the one or more programmatic target interfaces are defined according to a common programmatic target interface specification (col. 11, lines 5-11) and are exposed during a bulk data transfer, the bulk data transfer enables loading of the one or more data entities extracted from the one or more selected source data stores during the bulk data transfer (col. 11, lines 5-11; col. 12, lines 31-33; col. 10, lines 56-63);

12. As per claims 4, 16, and 28, Jayaram teaches the invention as claimed in claims 1, 13, and 25 above. Jayaram further teach a particular data store may be a source data store or a target data store for a particular bulk data transfer depending on whether data entities are extracted from the particular data store or loaded into the particular data store during the particular bulk data transfer (inherent in col. 2, lines 15-20).

13. As per claims 5, 17, and 29, Jayaram teaches the invention as claimed in claims 1, 13, and 25 above. Jayaram further teach loading data entities comprises inserting, updating, or deleting data entities (col. 11, lines 1-11) (uploading data must comprises inserting data into a target system).

14. As per claims 6, 18, and 30, Jayaram teaches the invention as claimed in claims 1, 13, and 25 above. Jayaram further teach within each programmatic interface, one or more resources representing data entities contained in the corresponding data store are defined (col. 14, lines 18-22); and the system is operable to, in response to a request to execute a bulk data transfer involving one or more resources contained in one or more data stores (col. 10, lines 56-63), create each programmatic interface within which at least one of the resources is defined (col. 14, lines 26-28).

15. As per claims 8, 20, and 32, Jayaram teaches the invention as claimed in claims 6, 18, and 30 above. Jayaram further teach one or more programmatic interfaces are defined within each session interface (col. 16, lines 24-26); each session interface isolates from its one or more defined programmatic interfaces details associated with export and import of resources involved in a bulk data transfer (col. 16, lines 26-52); and the system is further operable to, in connection with creating the programmatic interfaces, create each session interface within which at least one of the programmatic interfaces is defined (col. 16, lines 21-26).

16. As per claims 9, 21, and 33, Jayaram teaches the invention as claimed in claims 8, 20, and 32 above. Jayaram further teach session interface persists, once created, either for the entirety of the bulk data transfer or for the entirety of multiple data transfers according to its definition (col. 16, lines 22-52).

17. As per claim 38, Jayaram teaches the invention as claimed for providing bulk data transfers between one or more data stores (col. 11, lines 1-11), comprising:

a data integration server (combination of 220, 234, 235, 250, 260, 270 of fig. 2) coupled with the one or more data stores (col. 11, lines 1-11), the data integration server comprising:

one or more programmatic source interfaces, each being associated with one or more source data stores coupled to the data integration server, wherein the one or more programmatic source interfaces are defined according to a common programmatic source interface specification (col. 11, lines 1-5) and are exposed during a bulk data transfer, the bulk data transfer, one or more data entities are extracted from the one or more source data stores for loading into one or more selected target data stores (col. 11, lines 5-11; col. 10, lines 56-63; col. 12, lines 4-22); and

one or more programmatic target interfaces, each being associated with one or more target data stores coupled to the data integration server, wherein the one or more programmatic target interfaces are defined according to a common programmatic target interface specification (col. 11, lines 5-11) and are exposed during a bulk data transfer, the bulk data transfer enables loading of the one or more data entities extracted from the one or more selected source data stores during the bulk data transfer (col. 11, lines 5-11; col. 12, lines 31-33; col. 10, lines 56-63), wherein each programmatic interface comprises: a definition of one or more resources representing data entities contained in the corresponding data store (col. 14, lines 18-22) such that the system is operable to, in response to a request to execute a bulk data transfer involving one or more resources contained in one or more data stores (col. 10, lines 56-63), create each programmatic interface within which at least one of the resources is defined (col. 14, lines 26-

28); and one or more session interfaces, each session interface: comprising a definition of one or more programmatic interfaces (col. 16, lines 24-26) such that the system is further operable to, in connection with creating the programmatic interfaces, create each session interface within which at least one of the programmatic interfaces is defined (col. 16, lines 21-26); and isolating from its one or more defined programmatic interfaces details associated with export and import of resources involved in a bulk data transfer (col. 16, lines 26-52).

Claim Rejections – 35 USC 103

18. Claims 10-12, 22-24, and 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jayaram.

19. As per claims 10, 22, and 34, although Jayaram teaches allow each programmatic interface to produce or consume data entities in a desired format particular to the programmatic interface (col. 11, line 57-col. 12, line 22); convert data entities produced in a first format particular to a programmatic source interface to a second format particular to a programmatic target interface (col. 5, lines 50-63), however, Jayaram does not teach convert only if necessary because the first and second formats are different. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to include conversion of data only if the first and second formats are different in order to avoid inefficient process of conversion between data stores of the same format.

20. As per claims 11, 23, and 35, although Jayaram teaches one or more programmatic interfaces, each programmatic interface being associated with a corresponding data store and exposed within the data integration server during a bulk data transfer to enable the data integration server to read data entities directly from and write data entities directly to the corresponding relational data store during the bulk data transfer, however, Jayaram does not teach relational interfaces. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to include relational interface as alternative of programmatic interface because by doing so it would allow backup interface for performing the functions of the programmatic interfaces in case of failure in the programmatic interface, thus providing alternative interface without using the programmatic interface.

21. As per claims 12, 24, and 36, Jayaram teaches the invention as claimed in claims 11, 23, and 35 above. Jayaram further teach an interface schema file providing a database-neutral description of a physical database schema of the corresponding relational data store (col. 2, lines 39-55); and an interface mapping file providing a logical-to-physical mapping for all data entities defined for the relational interface to enable the data integration server to execute bulk data transfers between relational data stores having different physical database schema (col. 16, lines 22-41).

22. Claims 7, 19, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jayaram in view of Jennyc et al, U.S. Patent 6,334,158 (hereinafter Jennyc).

23. Jennyc was cited in the previous office action.

24. As per claims 7, 19, and 31, Jayaram does not teach release of interface. Jennyc teaches programmatic interface persists, once created: if a programmatic source interface, resources of the programmatic source interface are released (col. 20, line 65-col. 21, line 5); and if a programmatic target interface, resources of the programmatic target interface are released (col. 20, line 65-col. 21, line 5).

25. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Jayaram and Jennyc because Jennyc's teaching of releasing resource would improve the efficiency of Jayaram's system allowing resources to be release for allocation to other processes.

26. Jayaram and Jennyc do not teach when to release the interface. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to release the interface after the data transfer in order to avoid interruption during the transfer of the data.

27. Claims 2, 14, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jayaram in view of Shannon et al, U.S. Patent Application Publication 2002/0046301 (hereinafter Shannon).

28. Shannon was cited in the previous office action.

29. As per claims 2, 14, and 26, Jayaram does not teach Java interfaces. Shannon teaches Java interfaces ([0031] and claim 5).

30. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Jayaram and Shannon because Shannon teaching of Java interfaces would provide a greater ease of integration by allowing data to be mapped from one application to another application.

31. Claims 3, 15, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jayaram in view of Casagrande et al, U.S. Patent 6,381,709 (hereinafter Casagrande).

32. Casagrande was cited in the previous office action.

33. As per claims 3, 15, and 27, Jayaram teaches the invention as claimed in claims 1, 13 and 25 above. Although Jayaram teaches the one or more programmatic interfaces may be supporting bulk data transfers (col. 11, lines 1-5); and the system is operable to: create the corresponding programmatic interface to enable extraction of the data from or loading of the data into the data store (col. 14, lines 26-28); and for data extraction, as the programmatic source interface produces the data extracted from the data store, send the outgoing data; or for data loading, as the data arrives, send the incoming data to the programmatic target interface for loading into the data store (col. 11, lines 1-11), however, Jayaram does not teach industry

standard interface and industry standard protocol. Casagrande teaches an interface supporting data transfer according to an industry standard protocol (fig. 4, col. 8, lines 60-67); receive a request from a client indicating that the client is extracting data from or loading data into a data store in accordance with the industry standard protocol (col. 3, lines 48-51); and send the outgoing data to the client in accordance with the industry standard protocol (col. 3, lines 1-4).

34. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Jayaram and Casagrande because Casagrande teaching of industry standard protocol interface would enhance and make it easier for Jayaram's system to transfer data between data stores using well known protocol such as FTP.

35. Applicant's arguments with respect to claims 1-38, filed 09/17/07, have been fully considered but they are not persuasive.

36. In the remark, applicant argued that:

- (1) Jayaram fails to teach a computer-implemented data integration system for providing bulk data transfers between one or more data stores and in particular Jayaram fails to teach a data integration server coupled with the one or more data stores comprising one or more programmatic source interfaces and one or more programmatic target interfaces.

37. In response to point (1), Jayaram teaches a computer system (e.g. combination of 220, 234, 235, 250, 260, 270, fig. 2) for transferring data from a source database (320, fig. 2) to a target database (310, fig. 2) (col. 11, lines 1-11) (i.e., a data integration server coupled with the one or more data stores). This means the processes of 220, 234, 235, 250, 260, 270 in figure 2 must be executed on a computer (i.e., server) in order to perform the transferring of data between source database and target database. Since the combination of processes (220, 234, 235, 250, 260, 270, fig. 2) performs the function of an integration data server, therefore, the combination of processes is considered as the claimed integration data server comprising one or more programmatic source interfaces (234,235, fig. 2) and one or more target interfaces (270, fig. 2).

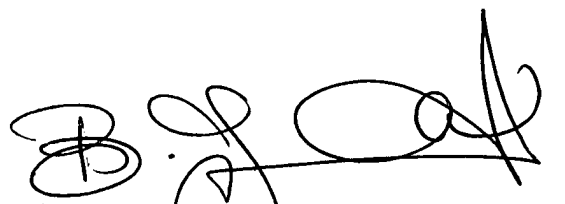
38. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip C Lee whose telephone number is (571)272-3967. The examiner can normally be reached on 8 AM TO 5:30 PM Monday to Thursday and every other Friday. If attempts to reach the examiner by

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telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on (571) 272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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SUPERVISORY PATENT EXAMINER
12/10/7